WHAT IS CLAIMED IS:

1. An optical waveguide identification system, comprising:

an optical waveguide, comprising

a core having an end portion,

a cladding disposed around said core, said cladding having an end portion, and

an end face comprising the end portions of said core and said cladding, said end face having a peripheral end area; and

a machine-readable identifier disposed within the peripheral end area of said end face, said machine-readable identifier comprising information about said optical waveguide.

2. A system according to Claim 1, wherein said machine-readable identifier is etched into said end face.

3. A system according to Claim 1, wherein the information of said machine-readable identifier comprises one of an assembly orientation of said optical waveguide, manufacturing information for said optical waveguide, a dimension of said core, a dimension of said cladding, a composition of said core, a composition of said cladding, and indices of refraction of said optical waveguide.

4. A system according to Claim 1, wherein the peripheral end area of said end face comprises an exterior 80% of the end portion of said cladding.

5. A system according to Claim 4, wherein the peripheral end area of said end face comprises an exterior 50% of the end portion of said cladding.

6. A system according to Claim 5, wherein the peripheral end area of said end face comprises an exterior 20% of the end portion of said cladding.

7. A system according to Claim 6, wherein the peripheral end area of said end face comprises an exterior 10% of the end portion of said cladding.

8. An optical waveguide identification system, comprising:

an optical waveguide, comprising

a core having an end portion,

a cladding disposed around said core, said cladding having an end portion and a peripheral edge area, and

an end face comprising the end portions of said core and said cladding, said end face having a peripheral end area; and

a first machine-readable identifier disposed within the peripheral end area of said end face, said first machine-readable identifier comprising information about said optical waveguide; and

a second machine-readable identifier disposed within the peripheral edge area of said cladding, said second machine-readable identifier comprising information about said optical waveguide.

9. A system according to Claim 7, wherein said first and second machine-readable identifiers comprise substantially identical information.

10. A system according to Claim 7, wherein said second machine-readable identifier comprises a series of disruptions disposed in said cladding.

11. A system according to Claim 7, wherein the information of said first and second machine-readable identifiers comprises one of an assembly orientation of said optical waveguide, manufacturing information for said optical waveguide, a dimension of said core, a dimension of said cladding, a composition of said core, a composition of said cladding, and indices of refraction of said optical waveguide.

12. An optical waveguide identification system, comprising:

an optical waveguide, comprising

a core, and

a cladding disposed around said core, said cladding having a peripheral edge area; and

a machine-readable identifier disposed within the peripheral edge area of said cladding, said machine-readable identifier comprising information about said optical waveguide.

13. A system according to Claim 11, wherein said machine-readable identifier comprises a series of disruptions disposed in said cladding.

14. A system according to Claim 11, wherein said machine-readable identifier is etched into said cladding.

15. An optical waveguide identification system, comprising:

an optical waveguide, comprising

a core having an end portion,

a cladding disposed around said core, said cladding having an end portion,

an end face comprising the end portions of said core and said cladding, and

an optical mask disposed on said end face, said mask having a peripheral end area and a peripheral edge area; and

a machine-readable identifier disposed within the peripheral end area of said mask, said machine-readable identifier comprising information about said optical waveguide.

16. A system according to Claim 15, wherein said machine-readable identifier comprises a plurality of machine-readable identifiers disposed within the peripheral end area of said mask, each of said plurality of machine-readable identifiers comprising information about said optical waveguide.

17. A system according to Claim 15, further comprising an optical filter disposed between said end face and said mask.

18. A system according to Claim 15, wherein the information of said machine-readable identifier comprises one of an assembly orientation of said optical waveguide,

manufacturing information for said optical waveguide, a dimension of said core, a dimension of said cladding, a composition of said core, a composition of said cladding, and indices of refraction of said optical waveguide.

19. A system according to Claim 15, wherein said machine-readable identifier is etched into said mask.

20. A system according to Claim 15, further comprising a second machine-readable identifier disposed within the peripheral edge area of said mask, said second machine-readable identifier comprising information about said optical waveguide.

21. A system according to Claim 20, wherein said first and second machine-readable identifiers comprise substantially identical information.

22. An optical waveguide identification system, comprising:

an optical waveguide, comprising

a core having an end portion,

a cladding disposed around said core, said cladding having an end portion,

an end face comprising the end portions of said core and said cladding, and

an optical mask disposed on said end face, said mask having a peripheral edge area; and

a machine-readable identifier disposed within the peripheral edge area of said mask, said machine-readable identifier comprising information about said optical waveguide.

23. A system for aligning optical components, comprising:

a first reading device that reads information from an identifier on an optical waveguide;

an alignment device that aligns the optical waveguide with respect to an optical component; and

a controller that controls said alignment device, based on the information read by said first reading device.

24. A system according to Claim 23, further comprising:

a second reading device that reads information from the identifier on the optical waveguide;

wherein said controller further controls said alignment device, based on the information read by said second reading device to fine tune the alignment of the optical waveguide with respect to the optical component.

25. A system according to Claim 24, wherein said alignment device comprises:

a pair of rollers, said pair of rollers supporting the optical waveguide; and

a drive motor, said drive motor engaging one roller of said pair of rollers to rotate said one roller,

wherein said controller controls said drive motor to rotate said one roller to align the optical waveguide, based on the information read by said first and second reading devices.

26. A system for aligning optical components, comprising:

a reading device that reads information from an identifier on an optical waveguide;

an alignment device that aligns the optical waveguide with respect to an optical component, said alignment device comprising

a pair of rollers, said pair of rollers supporting the optical waveguide, and

a drive motor, said drive motor engaging one roller of said pair of rollers to rotate said one roller; and

a controller that controls said alignment device, based on the information read by said reading device,

wherein said controller controls said alignment device by controlling said drive motor, thereby rotating said one roller to align the optical waveguide.

27. A method for assembling quality optical components, comprising the steps of:

providing an optical waveguide having a machine-readable identifier thereon;

reading the information comprised in the identifier;

aligning the optical waveguide with respect to an optical component, based on the information read in said reading step; and

coupling the optical waveguide to the optical component.

28. A method according to Claim 26, further comprising the step of fine tuning the alignment of the optical waveguide with respect to the optical component.

29. A method according to Claim 28, further comprising the steps of:

reading the information comprised in the identifier after the optical waveguide has been joined to the optical component; and

determining if the optical waveguide is properly aligned with the optical component.

30. A fiber optic segment, comprising:

an end face having a peripheral end area;

a side face having a peripheral edge area; and

a machine-readable identifier disposed on said segment and readable from one of the peripheral end area of said end face and the peripheral edge area of said side face.

31. A fiber optic segment according to Claim 30, wherein said machine-readable identifier is disposed on said end face in the peripheral end area.

32. A fiber optic segment according to Claim 30, wherein said machine-readable identifier is disposed in said end face in the peripheral end area.

33. A fiber optic segment according to Claim 30, wherein said machine-readable identifier is disposed on said side face.

34. A fiber optic segment according to Claim 30, wherein said machine-readable identifier is disposed in said side face in the peripheral edge area.